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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,413	08/20/2003	Robert J. Mancuso	XXRM-18J	7925
7590	08/02/2006		EXAMINER	
Iandiorio & Teska 260 Bear Hill Road Waltham, MA 02451-1018			BATTULA, PRADEEP CHOUDARY	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,413

Applicant(s)

MANCUSO, ROBERT J.

Examiner

Pradeep C. Battula

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 9-32 and 35-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,33 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/02/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/18/06 & 12/31/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Claims 1 – 8, 21, 22, 24, 33, and 34 in the reply filed on June 5, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicant's election without traverse of Claims 1 – 8, 33, and 34 in the reply filed on July 17, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 33 is rejected under 35 U.S.C. 112, first paragraph, as based on a claim that omits an element which applicant describes as an essential or critical feature of the invention originally disclosed does not comply with the written description requirement. See *Gentry Gallery*, 134 F.3d at 1480, 45 USPQ2d at 1503; *In re Sus*, 306 F.2d 494, 504, 134 USPQ 301, 309 (CCPA 1962). Please refer to Paragraph 39 of Mancuso (U.S. 2005/0040643) where applicant discloses that a clear substrate and transmissive

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ink for the colored lines are necessary for the variable color print of an image without a reflective layer.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as based on a claim that omits an element which applicant describes as an essential or critical feature of the invention originally disclosed does not comply with the written description requirement. Please refer to Paragraph 39 of Mancuso (U.S. 2005/0040643) where applicant discloses that a clear substrate and transmissive ink for the colored lines are necessary for the variable color print of an image without a reflective layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 8, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mancuso (Manusco, U.S. 4,932,685) in view of Hutton et al. (Hutton, U.S. 4,033,059).

In regards to Claim 1, Mancuso discloses a variable color print of an image comprising: a substrate 27 (Column 4, Lines 34 – 36; Figure 1B, Item 27); a series of

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parallel differently colored lines of printed ink 28 (Column 3, Lines 24 – 30; Column 4, Lines 34 – 42; Figure 1B, Items 30, 32, 34).

Mancuso does not disclose a series of parallel printed mounds of clear ink over the colored lines of printed ink to vary the reflective angle of the colored lines of printed ink as the viewing angle changes.

Hutton discloses a series of parallel printed mounds 33 of clear ink able to be printed over the colored lines of printed ink (Column 4, Lines 46 – 54; Column 13, Lines 45 – 49; Column 14, Lines 31 – 37; Figure 7, Items 33 and 37) in order to vary the reflective angle of the colored lines of printed ink as the viewing angle changes, without the need of debossing substrate 31 (Column 2, Lines 45 – 55; Figure 8, Item 39; Column 13, Line 15, Figure 7, Items 31, 33). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include parallel printed mounds of clear ink, as taught by Hutton, to enhance the visibility of the variable color print of an image.

In regards to Claim 2, as applied to Claim 1, Mancuso discloses the print of Claim 1 in which the substrate 27 is paper (Column 6, Lines 1 – 4).

In regards to Claim 3, as applied to Claim 1, Mancuso discloses the print of Claim 1 in which the substrate 27 is plastic due to disclosure of a transparent substrate (Column 4, Lines 6 – 9).

In regards to Claim 4, as applied to Claim 1, Mancuso discloses the print of Claim 1 in which the substrate is transmissive due to a series of opaque lines on the top of the substrate (Column 4, Lines 6 – 9).

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In regards to Claim 5, as applied to Claim 1, Mancuso discloses the print of Claim 1 further including a reflective surface 29 between the lines of printed ink 28 and the substrate 27 (Column 4, Lines 34 – 40; Figure 1, Item 27, 29, 30, 32, 34).

In regards to Claim 6, as applied to Claim 1, the print of Claim 1 in which the reflective surface 29 is a foil layer (Column 4, Lines 34 – 40).

In regards to Claim 7, as applied to Claim 1, Hutton discloses that there can be five to 1,000 lines per inch with the ink lines 33 and background lines 37 being of the same width (Column 8, Lines 25 – 31; Claim 3). Therefore, the ink mounds of Hutton are capable of having a width equivalent to the width of two colored lines.

In regards to Claim 8, as applied to Claim 1, Mancuso discloses parallel lines of colored ink 28 without any gaps as seen in Figure 1B. Hutton discloses gaps in the parallel lines of ink mounds 33 (Column 13, Lines 45 – 48; Figure 7, Item 13) therefore the combination as applied in Claim 1 yields differently colored printed ink between the mounds.

In regards to Claim 33, Mancuso discloses a variable color print of an image comprising: a substrate 27 (Column 4, Lines 34 – 36; Figure 1B, Item 27). Mancuso further discloses colored ink lines 28 above substrate 27 (Figure 1B, Items 30, 32, 34).

Mancuso does not disclose a series of printed mounds of clear ink.

Hutton discloses a series of printed mounds 33 of clear ink (Column 13, Lines 45 49; Column 14, Lines 31 – 37; Figure 7, Item 33, 37) in order to vary the reflective angle of the colored lines of printed ink 37 as the viewing angle changes, without the need of debossing substrate 31 (Column 2, Lines 45 – 55; Figure 8, Item 39; Column 13, Line

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15, Figure 7, Items 31, 33). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include parallel printed mounds of clear ink, as taught by Hutton, to enhance the visibility of the variable color print of an image.

With respect to the viscosity of the ink used for the clear mounds, the applicant fails to disclose the criticality of the range and viscosity. Mancuso modified by Hutton discloses the claimed invention except for the clear ink viscosity being between 1500 – 3000 cent poise. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use clear ink with 1500 – 3000 cent poise, because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

In regards to Claim 34, as applied to Claim 33, Mancuso discloses the print of Claim 33 in which the substrate 27 includes a reflective surface 29 on which the colored ink lines 28 are printed (Column 4, Lines 34 – 40, Figure 1B, Items 27, 29, 30, 32, 34).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pradeep C. Battula whose telephone number is 571-272-2142. The examiner can normally be reached on Monday - Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PB

July 26, 2006

Monica S. Carter
SPE, AU
3722